



**Forestry Innovation
Investment[®]**

2018/19 Investment Strategy

Market Initiatives Program

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1. INTRODUCTION

Maintaining British Columbia's global forest sector leadership requires constant innovation, and continuing effort to develop and diversify markets. Forestry Innovation Investment (FII) was established in 2003 as the provincial agency responsible for maintaining and expanding markets for B.C. forest products. FII works in collaboration with the forest industry, research institutions, the federal government and other stakeholders to deliver innovative, forward-looking programming that responds to today's domestic and international market dynamics, as well as tomorrow's challenges and opportunities.

The B.C. forest industry is recognized globally for its production of high-quality wood products, leadership in sustainable forest management, and for innovation in harvesting, processing and the development of advanced wood construction technologies and building systems. The sector continues to be a major contributor to the provincial economy, representing 36% (\$13.9 billion) of the province's total exports (\$39 billion) in 2016¹. The forest industry's total annual economic output (direct, indirect and induced impacts) is estimated at more than \$30 billion². The sector employs roughly 60,000 British Columbians directly and supports over 7,000 businesses.³

This document outlines FII's strategy to provide funding through its Market Initiatives program in 2018/19, largely by way of providing funding to non-profit, forest sector organizations for work that they propose and ultimately deliver. Industry trade associations and research organizations typically play an important delivery role in many of these market development and market diversification activities by supporting specific industry sectors, products or species relevant to the B.C. industry. FII focuses its investments on government and industry priorities for the sector.

This Investment Strategy details the priorities of FII's Market Initiatives program for the year ahead and provides guidance for organizations that seek FII funding through its annual Market Initiatives Call for Proposals process. Ongoing market research and specific market development strategies developed jointly by FII, Natural Resources Canada and industry, inform FII's investment focus. Industry input is involved at all steps of the strategy development and planning process.

The annual Investment Strategy is developed in the context of FII's Strategic Plan that covers a five-year horizon, and FII's more detailed annual three-year Service Plan⁴. These documents are available on FII's corporate website (bcfii.ca).

¹ BC Stats, 2017

² PWC, *British Columbia's Forest Industry and the B.C. Economy in 2016*, 2017

³ BC Stats, 2017

⁴ FII's Strategic Plan, Service Plan and other corporate reports are available on the FII website at bcfii.ca

2. FII MANDATE AND MISSION

The mandate of FII is to:

- position British Columbia as a global supplier of world-class environmentally friendly forest products
- actively maintain, create and diversify demand for B.C. forest products in Canada and in key world markets
- help break down non-tariff trade and market barriers to ensure opportunities for B.C. forest products
- work with the forest industry to promote B.C.'s forest products and forest management to the global marketplace
- help ensure that the forest sector, through product development and strong international sales, continues to be a leading contributor to the B.C. economy

Mission

To develop and diversify domestic and international markets for B.C. forest products by working collaboratively with industry, government, and institutional partners; and by making well balanced investments that respond to government and industry priorities while maximizing value to the Province.

3. PURSUING GOVERNMENT PRIORITIES

As a B.C. Government Crown corporation, FII receives its funding from the B.C. Ministry of Jobs, Trade and Technology. Part of FII's funding is used to share the cost of industry-led market initiatives and part is used to pursue specific objectives the B.C. Government has set for the sector and for FII. In all cases, FII's activities and approach are aligned with the international and domestic market development objectives of both the Ministry of Jobs, Trade and Technology, and the Ministry of Forests, Lands, Natural Resource Operations and Rural Development (FLNRORD). A board of directors, chaired by the Deputy Minister of FLNRORD and vice chaired by the Deputy Minister of Advanced Education and Skills Training, ensures consistency with government strategic priorities.

While FII works closely with forest sector associations on these activities, it also plays a lead role in initiating and managing related projects on behalf of the Province. Where forest sector organizations or research institutes are positioned to support project activities, FII may contract directly with these organizations to assist with, or play a lead role in, project implementation.

FII has organized its efforts under three key programs:

- Market Outreach—communicating the benefits of wood, and positioning B.C. as global leader in the supply of environmentally friendly products from sustainably managed forests (delivered by FII on behalf of, and in consultation with, industry and government partners).

- Wood First—advancing wood use and innovative wood construction technologies at home in B.C. (primarily delivered by third-party organizations with funding managed through an annual competitive Wood First Call for Proposals process).
- Market Initiatives—developing and expanding markets for B.C. wood products internationally.

A brief summary of these initiatives is included below for reference.

Market Outreach Program

Market Outreach works to expand opportunities for B.C. forest products by positioning wood as an environmentally friendly, preferred building material, and by highlighting B.C. as a reliable supplier of quality products from sustainably managed forests. These activities create a solid foundation for answering the questions, “Why wood?” and “Why wood from B.C.?”—upon which many of the market development investments and activities of FII and industry are based.

The program focuses on taking advantage of two significant trends in the marketplace—the emerging recognition of wood products as renewable and sustainable, and increasing demands from consumers for forest products that are produced in an environmentally responsible manner. While individual firms and their trade associations do a good job of telling customers about the physical attributes of specific product lines and how they can be used, the Market Outreach program provides audiences with factual, consistent and credible information about the environmental parameters of B.C.’s forest products and the forest practices that underlie their production. Specifically, the program:

- provides information regarding B.C. forest practices and products to architects, engineers, developers and builders, foreign government regulators, importers, and to a limited extent, consumers
- champions science- and fact-based approaches to document B.C.’s forest practices, and the merits of wood-based construction technologies in the context of mitigating climate change and adopting green building standards
- collaborates with forest sector stakeholders to encourage consistent and compelling messages about product and building innovations and reducing environmental impacts
- monitors and advocates for codes, standards and policies that recognize the merits of wood and B.C. forest products

Learn more about FII's marketing efforts by visiting the comprehensive information resource, naturallywood.com.

Wood First Program

The Wood First program focuses on advancing wood use and innovative wood construction technologies in the province, and establishing B.C. as a showcase for forest products in construction, interior design and daily living. The scope includes both residential and non-residential buildings.

Planning and delivery of the Wood First program is a collaborative effort involving the building construction industry and the forest industry. FII provides overall management and administration of the program including aligning priorities and ensuring the best use of the funds. An advisory group (the

Wood First Advisory Committee) representing a cross-section of primary and secondary manufacturing industries and wood product end-use sectors provides recommendations on program priorities. Based on these recommendations, FII develops an investment plan that allocates available funding on an annual basis across several categories of activity including research, education, marketing and manufacturer capacity building. Specifically, Wood First focuses on:

- raising awareness of the province as a world leader in advanced wood construction and design
- advancing the use of wood building systems and technologies
- encouraging a robust valued-added sector in B.C., through enhanced capacity and competitiveness

The activities of the Wood First program are delivered primarily by third-party organizations under a cost-sharing framework that relies partially on contributions from industry. Organizations receive funding from FII through an annual competitive Call for Proposals. Learn more about applying for funding through the Wood First program by visiting bcfii.ca.

Market Initiatives Program

A central objective of the FII suite of programs is to identify and pursue opportunities outside the province that generate demand for B.C. forest products, further diversifying and strengthening the B.C. economy. To accomplish this objective, FII is mandated to conduct research and deliver and/or facilitate market development activities that help the forest industry capitalize on high-potential market opportunities.

The Market Initiatives program encourages the development of export markets and new market segments. Expanding B.C.'s trade relationships to fast growing markets in Asia helps to diversify the sector, open up new opportunities and sustains forest sector employment. Recognizing the long-standing importance of the North American market, FII is also investing in high-potential market segments to grow demand for B.C. wood products closer to home. FII works collaboratively with the forest industry, the federal government and the research community, focusing activities and leveraging resources to maximize results. Market Initiatives focuses on:

- researching opportunities in emerging and potential future markets, and initiating early market development activities
- supporting industry trade associations in developing and/or expanding markets and market segments for B.C. forest products
- supporting industry efforts to mitigate market access and plant health issues
- managing outreach and relationship building in China with Chinese authorities and state-owned real estate development companies
- undertaking early market development and profile building in India

Typically, FII uses a small portion of its Market Initiatives budget to lead market research efforts to evaluate high-potential emerging opportunities for the sector. In this pre-commercial phase, FII may also initiate early market development activities where opportunities to introduce B.C. forest products in a

region or market segment look particularly promising. While pre-commercial work is often led by FII, efforts are generally undertaken in conjunction with the federal government and with the engagement and support of the forest industry. Where interest and commercial demand has begun to develop and entry risk has been reduced, FII looks to industry and related trade associations to play a more active role in leading market development efforts.

While activities to explore emerging markets are an important element of the Market Initiatives program, the majority of effort and investment under the program is focused on advancing opportunities in existing markets such as the U.S., China, Japan, South Korea and India where the greatest short- and medium-term opportunities exist for the sector. Most of these market development efforts are delivered by forest sector trade associations, with cost-shared funding support from FII and the federal government.

In January 2015, a Market Priorities Committee of senior industry representatives was established to provide FII with external guidance and advice with respect to establishing priorities for market development programming. Activities under the Market Initiatives program are primarily delivered by third-party organizations on behalf of the industry-government collaborative. Available funding under the program is managed through an annual Call for Proposals process.

FII has separate strategies for its Market Initiatives, Wood First and Market Outreach programs. The Market Initiatives Strategy for 2018/19 (this document) summarizes the activities and areas where FII places the highest priority for market development investments in 2018/19.

4. GUIDING PRINCIPLES FOR INVESTMENTS

With the intent of maximizing economic benefit to the forest sector and the province, the following key principles guide FII's decisions about its own activities and about providing funding to other organizations. These guiding principles provide a framework to balance investments across markets and areas of competing interest within the forest sector.

- **Fact-based market strategies:** Priorities and strategies must be firmly rooted in current, relevant and comprehensive market information that provides a compelling business case for each market initiative.
- **Generating measured results:** Activities and investments should generate a positive return for the Province of B.C. As a result, FII will continue to give a priority to projects that will generate a financial return well exceeding the initial investment made to support the initiative. Projects must have well-developed performance measures, detail how the project's results and outcomes are measured, and explain how they relate to overall performance objectives.
- **Balancing short- and long-term investments:** FII must evaluate and demonstrate the results of its investments on an annual basis. As a priority, FII looks for projects that generate the desired impact and return on investment in the short term (i.e., within one year). FII recognizes, however, the need to take a long-term perspective in funding some activities in emerging markets where there is a compelling business case to do so, but that the return may take a number of years to be achieved.

- **Encouraging collaboration:** FII encourages collaboration and coordination among B.C. firms, trade associations, academic institutions and other eligible applicants. Higher priority will be given to activities that clearly demonstrate a high degree of stakeholder support and collaboration. FII supports a coordinated international approach, building upon the Canadian brand.
- **Encouraging innovation:** To ensure the best activities are identified for each market, FII encourages industry to bring fresh ideas and approaches to help achieve industry priorities.
- **Supporting growth across the B.C. industry:** Ensuring the overall health of B.C.'s forest economy means that funded activities should benefit as much of the industry as possible. FII seeks to support proposals that encourage growth and market development in terms of:
 - primary and secondary manufacturing including value-added products
 - different producing regions within B.C. that supply a variety of commercial species (e.g., SPF, hem-fir, cedar)
 - a variety of product groupings including solid wood, engineered wood products, panels, value-added, bio-energy and bio-chemical products, and pulp and paper products

5. OVERALL BUDGET ALLOCATIONS

FII receives the majority of its annual funding from the Ministry of Jobs, Trade and Technology. For 2018/19, FII anticipates receiving a level of funding similar to the current year. As in previous years, FII expects to allocate approximately half of its budget to sharing the cost of activities that other organizations propose and ultimately deliver (across its suite of programming). The remainder will be used to fund activities directly managed by FII staff including its subsidiary companies in China and India.

In 2017/18, FII funded \$6.5 million through the Market Initiatives Call for Proposals process. For 2018/19, FII anticipates investing a similar amount through the Call for Proposals to support activities proposed and delivered by industry and other eligible applicants⁵. The focus of this funding is on priority markets identified through FII's comprehensive research and market development strategies⁶. A summary of these priorities is included in section 6.

As noted above, the 2018/19 Market Initiatives Call for Proposals focuses on international markets and covers activities delivered outside of B.C. Market development activities focused in B.C. are funded through a separate Wood First Call for Proposals⁷.

⁵ Eligibility criteria can be found at bcfii.ca.

⁶ FII funded market research reports and market development strategies are available at bcfii.ca.

⁷ Information on the Wood First Call for Proposals can be found at bcfii.ca.

Anticipated funding allocations by region for 2018/19 are presented in the following table. FII reserves the right to make adjustments to this information until the time that FII enters into formal funding agreements.

FII Target Allocations – 2018/19	
<u>Region</u>	<u>(\$ Millions)</u>
CHINA	2.30
U.S.	1.80
JAPAN	1.20
KOREA	0.50
INDIA ⁸	0.30
ALL/OTHER MARKETS	0.30
CANADA ⁹	0.10
<u>TOTAL</u>	6.50

Readers who anticipate responding to FII’s annual Market Initiatives Call for Proposals should note that a detailed description of cost-sharing requirements and how to apply these to project proposals is provided in a supporting document, the “FII 2018/19 Market Initiatives Call for Proposals Application Guide”. Proponents are required to thoroughly review the Application Guide prior to preparing funding proposals. The Guide also contains new information on cost-sharing rules, and other policy changes. The Guide can be downloaded from FII’s website at bcfii.ca.

6. 2018/19 CALL FOR PROPOSALS PRIORITIES

FII’s Market Initiatives priorities target opportunities in two global regions: Asia and North America. The following outlines the priorities for FII investments in China and Japan going into 2018/19.

China

As B.C.’s largest market for commodity lumber outside North America, China is a priority market for the B.C. industry and for FII. Continued efforts to advance wood use in China, and to position exports from B.C. in high-potential growth and high-value segments, will remain the focus for 2018/19.

Drivers for wood consumption in China

While high-level drivers continue to create demand for wood in the China market—including urbanization, the growing middle class, and escalating environmental concerns—competition in China is increasing and the pace of growth has slowed.

While year-over-year lumber imports in China increased by 21% in 2016, recently Canadian market share in China has shrunk as competition within the lumber segment continues to grow. This loss of market share has largely been driven by both reduced shipments of low grades, which are shifting to

⁸ Does not include funding provided directly to FII’s subsidiary company, FII India.

⁹ Excludes B.C. domestic investments which are covered under the Wood First Program.

markets with a higher return, as well as growth of Russian lumber imports to China. Shipments of Russian lumber are growing particularly in applications where the decisive factor is low price: concrete forming and furring strips. However, Russia has recently been making significant inroads into the wood products manufacturing sector, which focuses primarily on furniture manufacturing. Overall imports from Russia in 2016 were 40% higher than 2015. At the same time, shifting exchange rates affected purchasing decisions made by Chinese importers as the weakened ruble and euro made lumber from Russia and Europe cheaper than from Canada.

Increased consumer spending and the rising middle class is an urban phenomenon. In 2016, China's urban population was 56% of the country's total population, with 36% being local urban residents and another 20% migrant workers. It is this local urban cohort where an affluent middle class is emerging. The proportion of these urban residents that are upper-middle class is projected to jump from 14% in 2012 to 54% in 2022.¹⁰ Over the same period, those classified as the urban affluent will rise from 3% to 9%.

The Chinese government has given official support to a number of different initiatives and concepts that may affect the construction industry and positively affect the use of wood in the medium term. During 2016/17 the following policy announcements were made:

- The State Forest Agency announced an extension of commercial logging bans to all natural forests which will support increased lumber imports.
- The Minister responsible for the national Ministry of Housing and Urban-Rural Development (MOHURD) publicly advocated for wood construction.
- The Guideline on Promotion of Prefabricated Construction was enacted and included wood construction.
- The 13th Five-Year Plan for Construction Energy Efficiency and Green Building Development included wood construction.
- The 13th Five-Year Action Plan for Prefabricated Construction included increased research into modern systems in mid- to high-rise wood construction.
- The 13th Five-Year Plan for the Construction Industry promoted the development of modern wood construction and encouraged the adoption of modern wood construction for tourism/resort applications and applications in rural areas.
- The Technical Standard for Multi-Story and High-Rise Timber Buildings, which takes effect in October 2017, provides for wood structures in tier-two and tier-three cities to have a height allowance of five-storeys.
- A tall wood building code was introduced at the national level and will take effect on October 1, 2017.

¹⁰ McKinsey & Company. *Mapping China's middle class*. <http://www.mckinsey.com/industries/retail/our-insights/mapping-chinas-middle-class>

B.C.'s strategic focus areas in China

During the 2016 China strategy review, two priority areas were identified and endorsed. The primary focus will remain advancing wood use in construction, with a parallel objective of increasing the unit value of construction lumber exports. The second priority is expanding the use of B.C. wood in China's wood products manufacturing sector, positioning B.C.'s unique species and the environmental pedigree that comes with Canadian wood products.

Advancing wood use within the construction sector

Over the past decade, industry programs have focused on low-rise, light wood-frame construction applications in China. Moving forward, FII encourages an expanded emphasis on other high-growth, high-potential construction applications that tie in with the Chinese governments aforementioned goals. This does not mean abandoning low-rise applications in China.

Moving forward, the emphasis will be increasingly on capturing market share within the mainstream construction industry. There will be an increased priority on finding applications for wood use in hybrid construction (e.g., using concrete and steel combined with wood in mid- to high-rise buildings). Also, finding ways to use wood to support construction industrialization (prefabrication) and expanding green building. Potential applications include substituting wood for other materials in partition walls, floors, exterior walls and in added storeys. To make such applications viable, Canada must prove the business case for wood versus aerated concrete blocks, steel and other competitive materials.

A second emphasis within wood construction lies in the resort sector. As China's population becomes increasingly affluent, domestic tourism is booming; a Canada Wood study found domestic tourism is now a CAD \$600 billion industry growing by 15% annually. While international destinations have seen significant increases in Chinese visitors, the Chinese government has placed a priority on developing and improving tourism facilities at home—to both attract visitors to China and to keep more Chinese tourism spending at home. Canada Wood China has opened three new offices in Wuhan, Chengdu and Guangzhou, which will create an opportunity to promote Canadian wood within the resort sector.

Hybrid and heavy timber/glulam construction represents another growth opportunity in both public and private sector construction. Promoting the natural beauty and aesthetic appeal of wood in structural and visible applications in larger buildings may both increase the consumption of wood in these projects, but also advance the visibility of wood in high-profile projects across China. Such projects are key to increasing acceptance and raising awareness of wood as a building material. The 2022 Winter Olympics in Beijing is a natural home for these projects.

Positioning Canadian wood for the manufacturing sector

The second priority area, that of expanding use of B.C. species in China's wood products manufacturing sector, has received some attention in the past but would benefit from a more aggressive approach going forward. One Canada Wood study revealed that the furniture sector uses approximately 36 million m³ of wood per year, roughly two-thirds hardwood and one-third softwood. This makes manufacturing the second-largest wood consuming segment in China and represents more than one-quarter of the imported softwood market. Other manufacturing segments such as doors, windows, interior finish, saunas and engineered beams also represent areas of interest.

While competition in this sector is strong, FII supports efforts to position B.C. species to take advantage of this large area of wood use. The environmental pedigree of forest products from B.C. can provide an advantage to manufacturers focused on export markets, where proof of sustainability and legality are required. Positioning the advantages and performance of B.C. species and B.C.'s reliability of supply may also be important factors.

Japan

As B.C.'s second-largest market outside North America, Japan remains an important and high-value market for B.C. wood products. B.C. and Canada have a long-standing presence in the Japanese market and are widely recognized as leading players in supplying wood products to the Japanese market.

While still well short of its ambitious promises, the Abenomics platform has stabilized Japan's economic prospects. Japan continued to add to its world-leading debt level, already 250% of GDP, with an announcement of a ¥28 trillion spending plan and a further delay on the increase in the national consumption tax until 2019. Negative interest rates remained in effect and are expected to continue at this level over the near term. The yen experienced a steady appreciation for the first eight months of the year, but settled at an exporter-friendly level of around ¥110 per \$USD.

Expanding the opportunity for wood use in multi-family residential, mid-rise, non-residential, public and institutional construction is a key priority in the coming year. Use of wood in multi-family and mid-rise construction has grown in Japan, and efforts to relax height and size limitations for wood use can further expand market opportunities. Residential starts in 2016 built on 2015's momentum to grow 6.4% year-over-year to 967,237 units. Policy measures on self-sufficiency and domestic timber utilization helped wood units outpace non-wood builds for a year-over-year growth of 8.3%. Backed by policy, the adoption of more wood solutions for non-residential construction also continued.

Non-residential wood solutions have already made strong gains in senior home construction (20.6% share). School construction has also recently been targeted where wood share has more than doubled over the past five years, reaching 11.5% in 2016. As well, Japan's torrid tourism growth offers strong promise in the hospitality sector where wood holds a 29.4% market share in sub three-storey builds. In 2016, the construction of 70,000 new hotel rooms was planned with 26% of these expected to occur in more rural and wood-friendly jurisdictions. The Tokyo Olympics in 2020 will continue to support the growth in hotel construction.

The single-family housing sector has been a mainstay of past efforts in Japan, both to position coastal species in Japan's post and beam housing segment, and to grow market share for platform-frame 2x4 housing. Platform-frame housing using Canadian species has gone from a new concept four decades ago, to being a well-accepted building system in Japan today. In 2016, 2x4 construction eclipsed 2013 levels to reach an all-time high of 123,713 units. Multi-family construction continues to dominate the segment accounting for 62% of all 2x4 builds, up from 54% in 2012. With total 2x4 starts growth of 66% over the past 10 years, rental multi-family units have accounted for all of this additional 2x4 adoption.

While FII acknowledges the importance of single-family construction for the industry, due a range of factors such as weakening demographics and higher quality, longer lasting housing stock, single-family construction is not viewed as offering strong growth opportunities for the future. Promoting wood

solutions in the non-residential sector will be necessary to stabilize wood consumption over the long term. Over the past five years, the non-residential segment has grown 11.6% by floor area, more than double the rate of residential floor area growth. The wood component of non-residential construction was 4.1M m² in 2016 or about 8% of the wood floor area in residential construction. FII continues to view maintaining existing single-family segments as important; however, FII places a somewhat greater priority on advancing expanding growth segments in Japan, particularly non-residential construction.

As a high-value market, Japan represents good niche opportunities for B.C.'s value-added sector. Where a strong business case exists, FII encourages market development opportunities that will position B.C.'s unique value-added products. Canadian panel products such as Oriented Strand Board (OSB) have developed a presence in the Japanese market, and have room for further growth.

Japanese government programs that promote domestic vs. imported wood, however, remain a concern for the B.C. industry and other offshore suppliers. There have been a number of examples in recent years where subsidies and policies have been used to promote domestic wood species, whether at the local prefectural level or more national in scope. Continued efforts to monitor government policies and domestic programs, and raise concerns in a timely and coordinated fashion, will remain important to maintaining B.C.'s position in Japan. While cooperative opportunities may exist to promote the use of wood more widely, it is important to ensure that any efforts include imported sources of legal and sustainable wood, not just domestic species.

South Korea

South Korea is B.C.'s sixth-largest market and B.C. has a 7.4% share of total softwood lumber imports. In March 2014, Canada and Korea concluded negotiations and signed a bilateral Free Trade Agreement, which is expected to create new opportunities for B.C.'s exports of softwood lumber and specialty products. During 2017, the 5% tariff on lumber imports from B.C. will be eliminated with similar tariffs on plywood and OSB to be removed within 10 years.

Korean GDP declined in the latter part of 2016 due to political uncertainty created by the impeachment of President Park, corporate restructuring and a drop in exports. The drop in exports were driven by China's decision to reduce Korean exports as a reaction to Korea's decision to deploy a missile defence system. However, with more government certainty, growth is projected to increase to 2.8% in 2018.

In 2016, wood building starts increased 10% to 14,945 and wood-frame construction (WFC) now makes up 13% of the single detached housing market, up from 10% in 2012. Of those wood buildings constructed in 2016, 76% (11,300) were residential. The continued movement of urban residents away from cities into new developments with a mix of detached, low and high-rise housing continues to fuel this trend.

The Korea strategy recognizes that the main area of opportunity is for wood use in construction and this remains the key priority for FII investments. Proposals that focus on expansion of wood use in residential construction, actively working to improve WFC building and design quality, and adoption of wood infill walls in all applications are key areas of priority.

Building construction in South Korea has seen an increase in regulation on environmental, sound and seismic codes over the past year and additional changes are expected in the future:

- Energy efficiency code changes are leading to increased insulation standards. Builders will experience increasing regulatory changes going forward as standards are developed and tightened.
- A September 2016 earthquake in the city of Gyeongju raised seismic stability concerns leading to the application of seismic codes to all buildings¹¹ as of February 2017.
- New enforcement of sound codes in Dagagu¹², which were exempt from these codes prior to 2016, will restrict the opportunity for use of structural wood floor systems in low-rise rental buildings.

In addition, non-residential construction has provided a smaller but steady market for wood while receiving little emphasis in the marketplace. The National Institute of Forest Science has initiated plans for a five-storey building by 2018 and a 10-storey building by 2022. Research to identify specific opportunities in this market is encouraged as are proposals that include opportunities to increase wood use in the non-residential construction market.

Opportunities to expand use of wood in both residential and non-residential renovations to meet Long-Life Housing policy goals are also encouraged, as are proposals to convert concrete and steel buildings to using wood infill wall systems. Efforts to expand the use of wood in high-value structural and non-structural applications are also encouraged. This includes promoting "showcase" buildings (high-profile public or accessible private buildings such as clubhouses and recreation facilities) that will increase the profile of wood as a building material and highlight the potential for Canadian wood products.

As per capita incomes continue to increase in Korea, and more attention is paid to higher quality homes and finishing, opportunities may expand for B.C. value-added products. Where growth opportunities exist, FII would encourage efforts to increase market share for B.C. value-added products in Korea.

FII, NRCan and industry have a market development strategy for Korea in place, which should be used to provide additional guidance.

India

The India economy is projected to have a 7.2% growth rate in 2017 and forecast by HSBC to overtake both Japan and Germany to become the world's third-largest economy within 10 years. HSBC is forecasting that India's GDP will grow from USD \$2.3 trillion to USD \$7 trillion by 2028. India is currently the fastest growing G20 economy and an increase in public sector wages and pensions will support continued consumption and growth. The workforce is forecast to grow from 885 million to 1.08 billion in the next 20 years and account for more than half the increase of Asia's workforce. With the introduction of the GST, there has been increased foreign direct investment which grew by 18% in 2016 to reach \$46 billion. The GST introduction has added transparency to the economy as businesses need to register

¹¹ Previously, seismic codes were applied to buildings 3 stories or higher.

¹² A Dagagu is an owner occupied house with rental suites.

with the GST network and file returns and upload invoices, which has created a built-in incentive to comply.

India's growing population is expected to reach 1.5 billion by 2030, up from 1.3 billion people in 2015. India's median age is just over 27 years, with per capita income rising over 7% annually. India's middle class is expected to grow 81%¹³ to 200 million by 2020, driving purchases of furniture, other consumer items and housing. These new consumers are changing the traditional face of India's furniture market. Solid, heavy, dark hardwood furniture was originally designed for large houses rather than the small urban living environments that young consumers can afford. A growing trend among the younger middle class is for easily shipped and assembled IKEA-style furniture. In many markets, this type of furniture is constructed with relatively inexpensive wood products, including softwoods, rather than higher-value hardwoods.

The objective of the market development program in India is to augment tropical and domestic hardwood with Canadian softwood, focused on applications for domestic production of doors, door frames, windows, architectural millwork and furniture for both the domestic and export markets. The comprehensive market development program involves a mix of research, networking and marketing activities. Additionally, the India office encourages commercialization by arranging product trials with manufacturers and securing high-profile demonstration projects with strategic partners. SPF remains the dominant species in current shipments from B.C. to India; however, interest is developing in coastal species for applications that have traditionally consumed hardwoods. This suggests positive growth prospects for hemlock, western red cedar, yellow cedar and Douglas fir.

India's fibre supply is changing rapidly as log imports have decreased each year since Myanmar's 2014 log export ban. At the same time, imports of Malaysian logs have also declined for the last three years. As log imports have cooled, the demand for lumber has increased since 2012. As of 2016, lumber represented about 13% of all imported wood fibre

While the furniture and door sector has shown the most promise on a short-term basis, the construction sector is also being explored. There are potential opportunities in the resort, tourism and secondary home markets, particularly in locations not impacted by termite infestation such as the mountainous areas and beaches. India has been recognized as a destination for spiritual tourism for domestic and international tourists. Total contribution by travel and tourism sector to India's GDP is expected to increase from USD \$136.3 billion in 2015 to USD \$275.2 billion in 2025. Travel and tourism is the third-largest foreign exchange earner for India. In 2014, the country managed foreign exchange earnings of USD \$19.7 billion from tourism. It is anticipated that the number of upper-middle class will increase from 146,000 to 294,000 by 2021 with a combined net worth of USD \$4.8 trillion driven by new upper-middle class from emerging sectors and new avenues for investments that give higher returns. With increasing affluence on the one hand and a growing realization that there is a need for a relaxed lifestyle at least on weekends, the concept of second homes started growing.

¹³ Compared to 2015.

FII, NRCan and industry have a market development strategy for India in place, which should be used to provide additional guidance.

Southeast Asia

In early 2015, FII, Natural Resources Canada, and the Canada Wood Group completed a market assessment of key markets in Southeast Asia, including Vietnam, Thailand, the Philippines and Indonesia. While not a significant market for B.C. forest product exports today, the region does hold potential for the future. The population of the region exceeds 500 million, and is growing by roughly seven million people per year. All major economies in the region are growing, creating a range of emerging business opportunities. Markets like Thailand and Indonesia hold promise for increasing domestic consumption of manufactured products, while low labour cost markets like Vietnam continue to provide the greatest short-term opportunities for manufacturing for export. The initial analysis would suggest that Vietnam likely represents the strongest short-term market opportunity for B.C. of the markets studied.

FII conducted an industry mission to Vietnam in May of 2017 and has initiated an in-market promotional program to determine if Vietnam is a potential market for Canadian softwoods. Vietnam's export of manufactured wood products rose to an estimated CAD \$8.4 billion in 2016. The growth in Vietnamese value-added wood products (VAWP) processing has outpaced the growth of domestic wood supply, and is up against its capacity in species such as rubberwood and acacia. This makes for a reliance on increasing imports to support further VAWP manufacturing growth. According to Viforest, an additional 4-5 million m³ per year of wood is required to meet 2020 export growth targets for the furniture industry¹⁴. Vietnam is increasingly seeking out softwood and hardwood imports, lumber and logs, to fill the void.¹⁵ Chile, New Zealand, the EU and Brazil all supply substantial volumes of softwood lumber to Vietnam while hardwood supply is dominated by the U.S. and the EU. Canada is not yet a major supplier in Vietnam. FII would encourage further evaluation of markets in Southeast Asia, with a priority placed on Vietnam.

As in all markets, FII would encourage a collaborative approach by key industry trade associations. Early market exploratory work, and the development of a focused and coordinated strategy would be early priorities for FII. Where it makes sense, alignment with efforts underway in China to grow B.C. exports in China's manufacturing sector (and similar efforts in India) are encouraged.

North America

In North America, FII places priority on the development of new or expanding market segments and growth in high-potential new areas. In the U.S. market, a key focus is on non-residential and multi-family, multi-story construction, where there is considerable opportunity to increase wood's market share. In Canada, FII supports development of new market segments and proposals outside of B.C.¹⁶

¹⁴ VietNamNet Bridge. *Wooden furniture manufacturers face material shortage.*

<http://english.vietnamnet.vn/fms/business/170803/wooden-furniture-manufacturers-face-material-shortage.html>

¹⁵ Vietnam imports are not available. This is based on aggregated countries that exported to Vietnam.

¹⁶ Funding for activities in B.C. must be submitted through the FII Wood First program.

North America represents the most important market for B.C.'s value-added products, and for high-value species such as western red cedar. FII encourages funding proposals that will advance opportunities for B.C. products and species, with a priority on expansion to new/growing market areas or the development of new and emerging market segments. Where possible, FII also encourages supporting small and medium-sized value-added companies to expand their markets in North America, and position themselves for future growth and expansion.

United States

In 2016, the U.S. economy sustained its long economic expansion as GDP grew 1.6%, though this was the weakest growth since the recovery began in 2010. By the end of the year, the country was into its 90th month of economic expansion¹⁷, now the third-longest period of expansion in the past 150 years. This is expected to continue as the International Monetary Fund is forecasting 2.3% GDP growth in 2017. The annual unemployment rate was 4.9% in 2016, which is in line with the expected 5% natural rate of unemployment in a healthy U.S. economy. Consumer confidence was strong but stable for much of 2016, with a late surge post-election that carried into Q1 2017.

Consumption of softwood lumber in the U.S. increased 10% in 2016. While domestic production remained flat, imports grew 24% to 40 million m³. Imports of lumber from B.C. rose 25%, although imports from the rest of Canada grew 6%. Consumption of wood panels also grew 7% in 2016. Similar to softwood, flat domestic production of panel products was met with a 19% increase in imports. B.C. panel exports to the U.S. improved 20% to 1.74 million m³, while exports from the rest of Canada increased to 5.48 million m³.

U.S. imports of VAWP reached a new record at \$30.2 billion (+6%) in 2016¹⁸. China continued to be the dominant supplier (\$13.4 billion), followed by the ASEAN region (\$6.5 billion) and Canada (\$4.1 billion). While majority of the products from China and ASEAN were wooden furniture, the bulk of the VAWP from Canada was reported as builders' joinery, which includes products such as shakes and shingles, doors, windows and fabricated wood members.

Several trends are influencing demand for B.C. wood products in the U.S. including:

- **Repair and Remodelling Sector**—The repair and remodelling (R&R) sector continued to be the largest driver of softwood lumber demand in 2016. R&R accounted for 45% of the 110 million m³ of softwood consumed, and 78% of the demand growth over 2015. Owners are choosing to stay longer and reinvest in homes. Home tenure averaged 13 years in 2015 compared to nine years in the 1985 to 2005 period.
- **Cross-laminated timber (CLT)**—CLT continues to capture the imagination of architects, owners and industry in the U.S. Until recently, CLT used in construction came from Canada and Europe. However, last year saw two U.S. plants become operational for construction-grade CLT panels, with a third recently announced in Washington State. Global production of CLT in 2015 was estimated at 650,000 to 700,000 m³, of which about 90% was produced in Europe.
- **Average Home Size**—Following the recovery, credit was constrained and demand for starter homes was weak. In 2016, the average size of a single-family home decreased 2.3% to 2,626

¹⁷ NAHB Economics, January 10, 2017

¹⁸ FPIInnovations via World Trade Atlas.

square feet as starter buyers returned. There may be a further shift toward smaller homes as cities densify due to millennials and baby boomers seeking housing closer to amenities and with lower maintenance. In 2016, townhouses accounted for 12.5% of single-family starts and the National Association of Home Builders (NAHB) expects the proportion of townhomes to continue to increase. Townhouses typically have smaller floor areas than detached homes, which could suppress the average house size and affect wood demand.

- Multi-family construction—Multi-family units represented 34% of all starts in 2016 (-2%), well above the 20% level seen in the two decades prior to the housing collapse. This high level of multi-family housing is driven by low home ownership and a shift toward rentals. Of the 390,000 multi-family units started last year, 93% were built for rent. The cost-driven nature of the rental construction market has been a boon for light-frame construction, which is very cost-effective in buildings from one–six storeys. Light-frame, multi-family starts consume only one-third of the wood products used in a single detached home (a loss of over 10 mfbm of lumber, panels, and engineered wood per start).

U.S. market strategy

The U.S. housing sector, in particular single-family home construction, remained the leading consumer of B.C. lumber, panels, cedar and VAWPs. However, with the market moving toward multi-family living, FII continues to focus its funding support toward work that expands wood beyond the single-family residential segment and into growth opportunity sectors in non-residential (commercial, institutional, recreational and educational) and multi-family/multi-storey construction. This segment still has significant opportunity to increase wood's market share, and to expand opportunities to use wood both structurally and architecturally. FII welcomes funding proposals that focus on growing wood use in these segments.

Maintaining support for value-added products is also a priority, as are investments targeting high-potential applications such as resort homes, log and timber frame structures, prefabricated housing, cabinetry, shakes and shingles, and millwork and finishing. Expanding opportunities for engineered wood products, remanufactured lumber and other products supplied by B.C. firms is also a priority. Promotion, research, or technical support for end users that will significantly enhance returns from R&R opportunities, as well as the development of niche opportunities in U.S. value-added markets remain a core part of the strategy for the U.S.

FII also recognizes that the U.S. is the most important export market for western red cedar; therefore, activities continued to position cedar in growing market segments and differentiate cedar products from non-wood substitutes are a priority.

FII in conjunction with the industry has developed a refreshed U.S. Strategy in 2016. Proponents are requested to thoroughly review the strategy prior to preparing funding proposals for the U.S.

Canada

FII continues to have an interest in promoting the use of B.C. forest products in growth segments in Canada. All activities in B.C. will be managed through the Wood First program; activities elsewhere in Canada will be considered in this Call for Proposals.

According to Royal Bank Canada, nation-wide, the probability of a steep and widespread housing downturn in Canada over the next 12 months remains low, although it has increased slightly because of the potential for overreaction to policy action in Ontario and for further policy tightening. The Vancouver market has adjusted in an orderly fashion to the 15% tax on homes purchased by foreign nationals. Its dampening effect on homebuyer demand may be waning, however. Interest rate risks are still contained but have increased recently.

The Canadian economy is expected to have real GDP expand by 2.0% in 2017 and 2.1% in 2018. The economy began to rebound in 2016 after the Fort McMurray fire-related decline in the second quarter. The year closed with strength in employment housing starts and business sentiment. Exports remained flat in 2016 due to currency rates, and weaker U.S. demand. The uncertainty over protectionist policies by the U.S. has created uncertainty for Canadian exports in 2017.

The share of multi-family units in total housing starts has noticeably increased over the past decade and this represents an area of further potential. While wood dominates low-rise residential construction in Canada, opportunities exist to expand wood use in non-residential, commercial, recreational, industrial and institutional sectors. With the 2015 National Building Code advancing wood use in mid-rise construction to six storeys for both residential and commercial occupancies, opportunities exist to propel these regulatory changes into expanded business for the wood industry.

Over the past decade, while other markets weakened, the Canadian market has remained crucial for B.C.'s value-added sector. Where high-potential opportunities exist with a strong business case for growth, FII will entertain proposals to expand value-added opportunities in Canada.

With much of the domestic market focused on traditional uses for wood products, FII will prioritize proposals that are able to demonstrate new market potential or significant growth opportunities in traditional or new segments. As Canada represents a mature market, proposals will need to make a strong business case for how additional promotional or research activities in traditional segments will significantly enhance returns from the domestic market.

Other Markets and Opportunities

FII recognizes that other markets and market segments are important to the industry, beyond those identified above. Where a compelling business case exists, FII will entertain funding proposals in existing markets. Where a compelling business case can be made for further investment in an existing market, it must be presented in a manner that focuses on genuinely new opportunities and that anticipates impacts of FII's additional investment.

Emerging markets

FII recognizes the importance of continuing to identifying new opportunities in the world's rapidly growing emerging markets. FII is open to funding applicants proposing pioneering activities and leading early market development efforts. FII encourages proponents interested in researching new market potential or pursuing new markets/segments not identified in this strategy to include a business case for FII funding.

Forest bio-products

FII investments predominately focus on innovation and market development related to the forest sector's primary and value-added wood products. However, FII recognizes that a fundamental shift is taking hold in the global market for forest products. Driven by concerns around climate change, the use of fossil fuels and other non-renewable energy sources, significant new opportunities are emerging to convert wood-based bio-mass into everything from electricity and heat to transportation fuels, bio-chemicals, plastics and next generation bio-materials. This vast new forest "bio-economy" has the potential to become an important segment of B.C.'s forest economy.

FII actively encourages industry in their efforts to identify and commercialize a new generation of forest bio-products. As other funding mechanisms currently support early stage research into bio-products, FII will not duplicate these investments. However, FII welcomes proposals that focus on better understanding the market(s) for commercial, or near-commercial forest-based bio-products. Proposals for investigations in this area could include analysis of market potential and/or propose research to identify market segments offering opportunity for the B.C. forest industry. For established and accepted products, such as wood pellets, proposals may focus on pursuing markets with strong commercial potential.

Pulp and paper

The pulp and paper sector remains an important and considerable contributor to B.C.'s forest economy. Approximately 40% of every tree harvested in B.C. is manufactured into pulp and paper products, which are sold around the world. Eighty-five percent of fibre for pulp and paper comes from wood chips and residues from the solid wood sector. The health of the whole forest products sector depends on a vibrant market for pulp and paper products to ensure the maximum usage of fibre supply.

FII recognizes that the pulp and paper sector operates in a different market context than the solid wood sector. In the case of pulp and paper, there are relatively few buyers and sellers and so the requirement for the type of industry-wide "market development" facilitated by FII is less as compared to company-specific sales activities, which are not supported by FII programs. However, FII remains open to receiving proposals from the pulp and paper sector where submissions are consistent with FII's operating principles (i.e. provision of industry-wide benefit) and where they will assist the sector to thrive in parallel to the solid wood industry.

7. HOW TO USE THIS INVESTMENT STRATEGY

The information included in this document provides an overview of FII market development priorities for 2018/19. The Investment Strategy is a key element of FII's Market Initiatives Call for Proposals process, providing guidance to organizations interested in proposing activities to FII for cost-shared funding.

The Market Initiatives Call for Proposals will open on **3 November, 2017**. Proposals must be submitted via the online funding management system no later than **23:59, 12 December, 2017**. Late proposals will not be accepted for evaluation. FII will accept and evaluate proposals in line with the market areas identified. FII also publishes detailed market development strategies, market research and other tools and resources for industry on the research section of its website (bcfii.ca) and via its online funding

portal (woodmarketdevelopment.ca). Please note that FII has published a detailed user guide to the online funding system to assist applicants in constructing online proposals. This guide is also available via the online funding portal or on the Investment and Funding section of the FII website.

Funding applicants are expected to align market development programs and funding proposals with the priorities identified in this Investment Strategy. Proposals for funding should also clearly note where other funding has been secured from government or quasi-governmental organizations to support the work proposed.

Applicants should clearly articulate in their funding proposals how proposed activities fit with this strategy. This can be done in a new section of the proposal template called “Link to Strategy” as well as in the Focus Area Rationales of their proposal. Funding applicants are required to review FII’s 2018/19 Call for Proposals Application Guide, and other information provided as a part of the Call for Proposals process. All relevant information can be found at bcfii.ca, or by contacting FII.